



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,075	10/31/2001	Dale L. Capewell	PW 249983 P13335	5323

7590 06/13/2003  
Pillsbury Winthrop LLP  
Intellectual Property Group  
Suite 2800  
725 So. Figueroa Street  
Los Angeles, CA 90017-5406

EXAMINER

WOOD, KEVIN S

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**RECEIVED**  
PILLSBURY WINTHROP LLP/LA

JUN 20 2003

CL# 081474 MT# 0249983  
ATTY(S) INTEL - PRW  
DUE: SEPT. 13, 2003 (3 MOS.) - DEC. 13, 2003 (6 MOS.)  
DKT BY (1) MSA (2)

# Office Action Summary

Application No.

10/003,075

Applicant(s)

CAPEWELL ET AL.

Examiner

Kevin S Wood

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 23-38 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-19 is/are allowed.
- 6) ☒ Claim(s) 1 and 20 is/are rejected.
- 7) ☒ Claim(s) 2,3,21 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

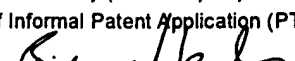
## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 4.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: 

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-22, drawn to couplers, classified in class 385, subclass 31.
- II. Claims 23-38, drawn to multiplexers, classified in class 398, subclass 43.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because any coupler that focuses/collimates light to and/or from an optical source could be used within the multiplexers of the current invention. The subcombination has separate utility such as the collimating/focusing assemblies could be utilized in any system that required light be collimated from a fiber or be focused into a fiber.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Art Unit: 2874

4. During a telephone conversation with Eric Chen on 6/5/03 a provisional election was made with traverse to prosecute the invention of group I, claims 1-22. Affirmation of this election must be made by applicant in replying to this Office action. Claims 23-38 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Drawings***

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 1, 2, 3, 5, and 6. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 recites the limitation "the optical source" in lines 7 through 8. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2874

***Claim Rejections - 35 USC § 103***

9. Claims 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. U.S. 6269,203 to Davies et al.

Referring to claim 20, Davies et al. discloses a focusing optical device, including: a wedge element (62) that receives the collimated beam, a spacer element; and an aspheric lens (74), where the assembly is fabricated of optically transparent material and integrated as a single part. Davies et al. does not appear to specifically disclose that the assembly is injection molded. However, it would have been obvious to one having ordinary skill in the art at the time of invention was made to utilize injection molding to form the assembly disclosed by Davies et al., because injection molding is a fast and inexpensive manufacturing process for producing molded components.

***Allowable Subject Matter***

10. Claims 4-19 are allowed.

11. Claim 1 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

12. Claims 2, 3, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 2874

Referring to claims 1-3, the prior art does not disclose all the combination of all the limitations of the claimed invention. The prior art does not disclose a an aspheric lens integrated on the second surface, where the aspheric lens serves to collimate the redirected light beam or focus the light beam before being redirected.

Referring to claims 4-7, the prior art does not disclose all the combination of all the limitations of the claimed invention. The prior art does not disclose a an aspheric lens integrated on the second surface, where the aspheric lens serves to collimate the redirected light beam or focus the light beam before being redirected.

Referring to claims 8-12, the prior art does not disclose all the combination of all the limitations of the claimed invention. The prior art does not disclose a an aspheric lens integrated on the second surface, where the aspheric lens serves focus the light beam before being redirected into the optical fiber core.

Referring to claims 13 and 14, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose the base of the triangular wedge having curvature to enable it to act as a cylindrical mirror and the input beam being an elliptically shaped beam before being redirected by the cylindrically curved base, the redirected light beam being a substantially circularly shaped beam.

Referring to claims 15-19, the prior art does not disclose the combination of all the limitations of the claimed invention. The prior art does not disclose a wedge element that refracts the collimated light beam into air at an angle relative to the axis of the aspheric lens consistent with Snell's law.

Art Unit: 2874

Referring to claim 21, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose a photodetector residing at the focus point of the aspheric lens.

Referring to claim 22, the prior art does not disclose all the limitations of the claimed invention. The prior art does not disclose a the spacer element being inserted to allow molten optical transparent material to more easily flow through the mold for fabricating the focusing optical subassembly.

***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Application Publication 2002/0067886 to Schaub

This reference discloses a device that is very similar to that of the claimed invention.

A handwritten signature in black ink, appearing to read 'Brian Healy', is written above the printed name.

Brian Healy  
Primary Examiner

<b>Interview Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/003,075		CAPEWELL ET AL	
	<b>Examiner</b>		<b>Art Unit</b>	
	Kevin S Wood		2874	

All participants (applicant, applicant's representative, PTO personnel):

(1) Kevin S Wood. (3)\_\_\_\_\_.

(2) Eric Chen. (4)\_\_\_\_\_.

Date of Interview: 05 June 2003.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1-38.

Identification of prior art discussed: \_\_\_\_\_.

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The examiner informed the applicant's representative that there were two inventions being claimed within the application, the first invention being couplers in claims 1-22 and the second invention being the multiplexer/filters in claims 23-38. The applicant's representative elected claims 1-22 without traverse.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

  
Brian Healy  
Primary Examiner

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
Examiner's signature, if required



## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

<b>Notice of References Cited</b>	Application/Control No. 10/003,075	Applicant(s)/Patent Under Reexamination CAPEWELL ET AL	
	Examiner Kevin S Wood	Art Unit 2874	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-2002/0067886-A1	06-2002	Schaub	385/33
	B	US-6296203-B1	07-2001	Davies et al.	385/24
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**


*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

10/003,075

2881

(Use several sheets if necessary)



**PATENT DOCUMENTS**

[illegible]

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
KSW	0 613 032 A2	2-11-94	EPO	602B	6/42		
KSW	0 857 992 A2	4-30-97	EPO	602B	27/01		
KSW	1 004 907 A2	7-26-99	EPO	602B	6/293		

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)


DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.